



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

November 31, 2017

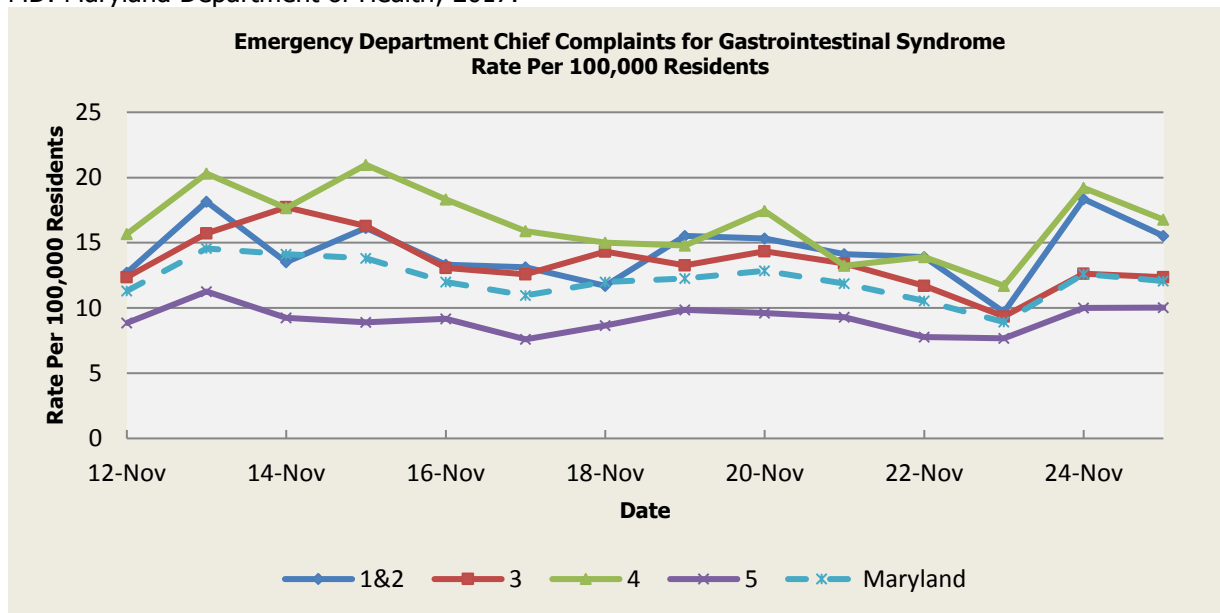
Public Health Preparedness and Situational Awareness Report: #2017:47 Reporting for the week ending 11/26/17 (MMWR Week #47)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts
Maryland: Normal (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

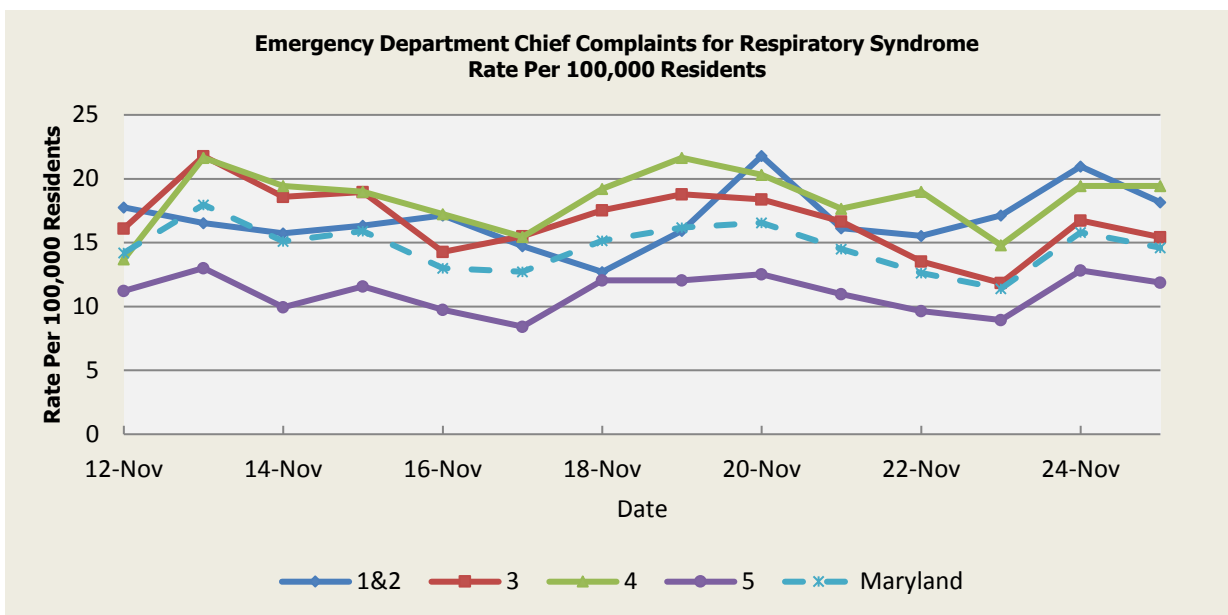
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week in a Hospital (Region 4).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.03	14.08	14.38	9.60	12.21
Median Rate*	12.91	14.80	15.02	10.22	12.95

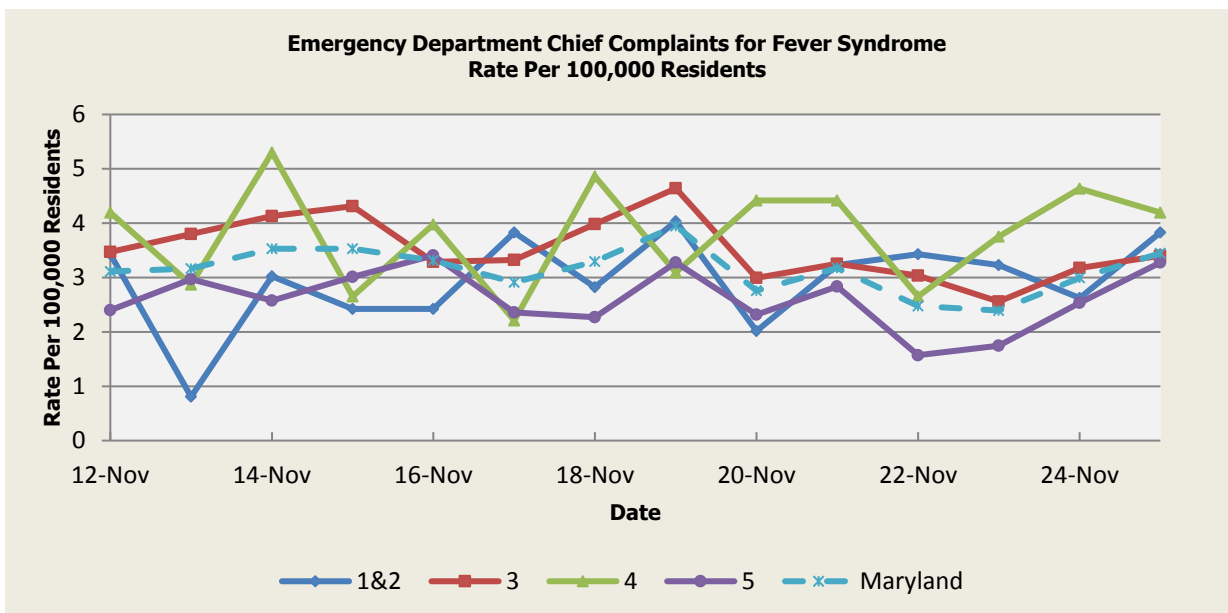
* Per 100,000 Residents



There were two (2) Respiratory illness outbreaks reported this week: one (1) outbreak of Influenza in a Hospital (Region 5); and one (1) outbreak of Legionellosis associated with a Fitness Center (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.23	13.47	13.37	9.28	11.67
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

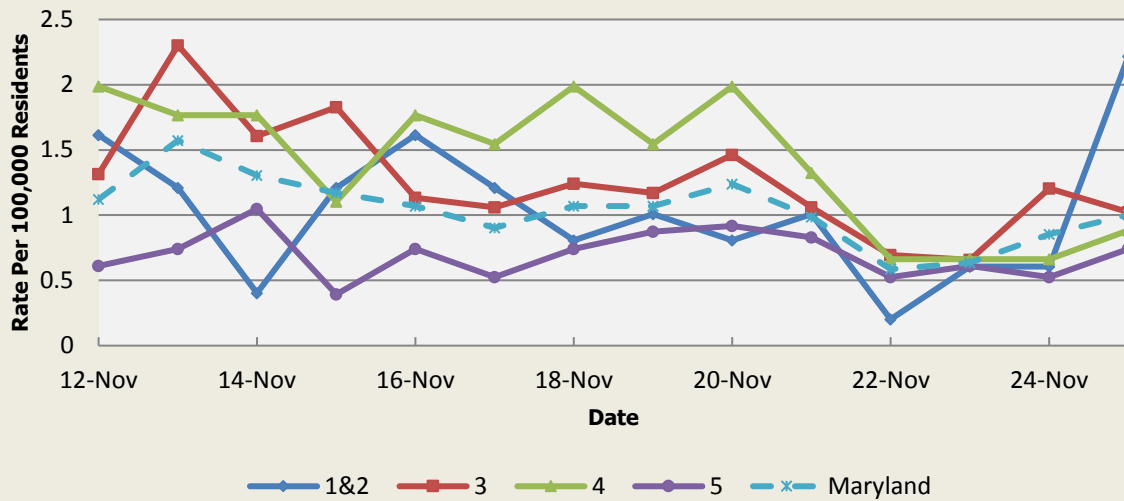


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.82	3.61	3.71	2.87	3.27
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



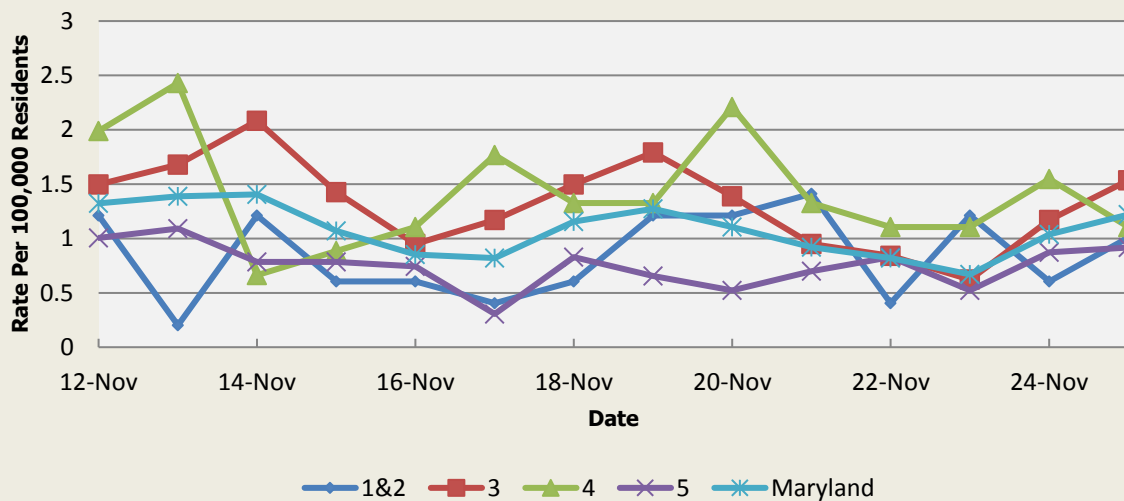
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.97	1.76	1.89	0.89	1.37
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

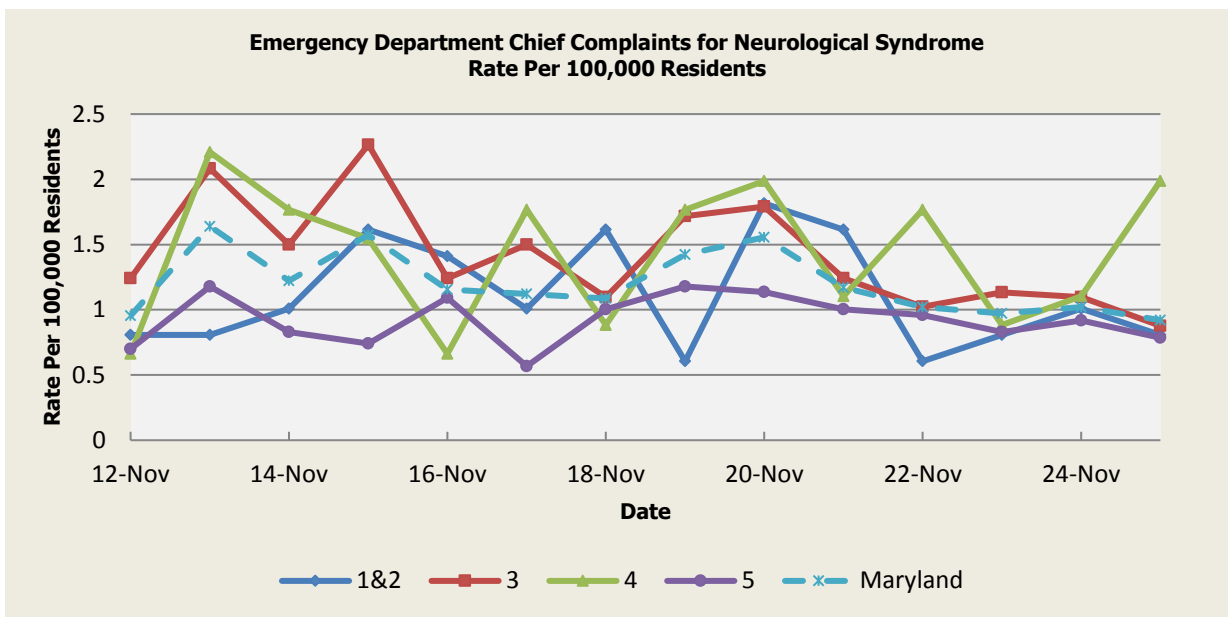


There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.16	1.63	1.65	0.96	1.34
Median Rate*	1.21	1.68	1.77	1.00	1.39

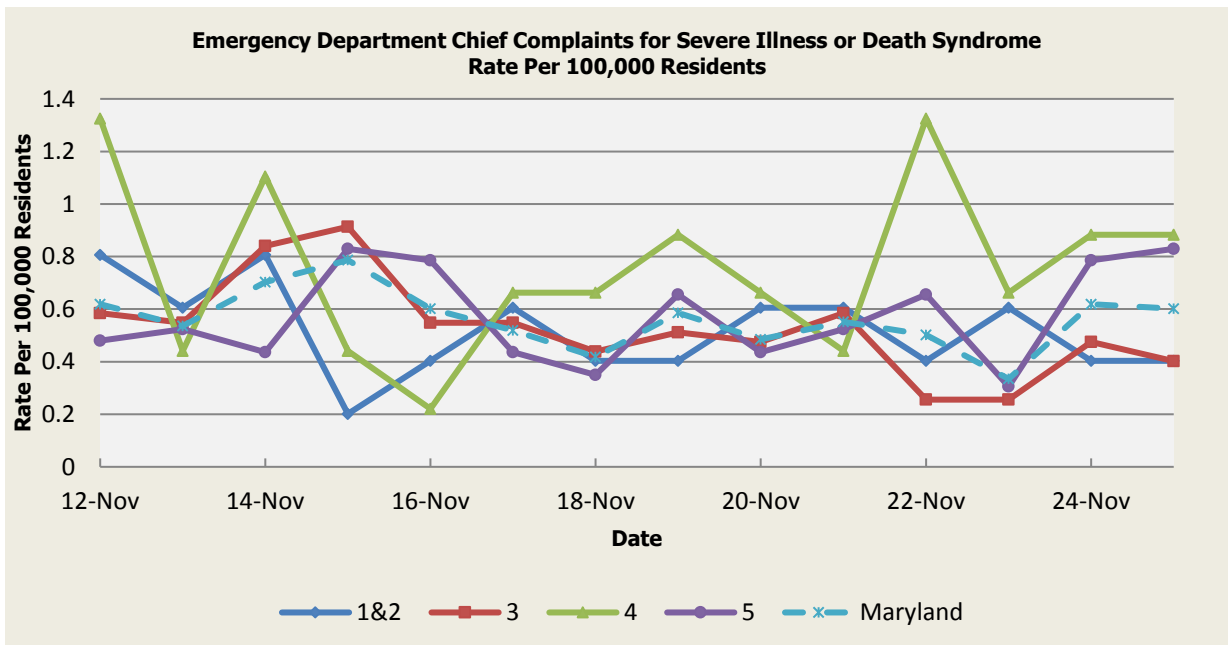
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.61	0.74	0.64	0.47	0.62
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

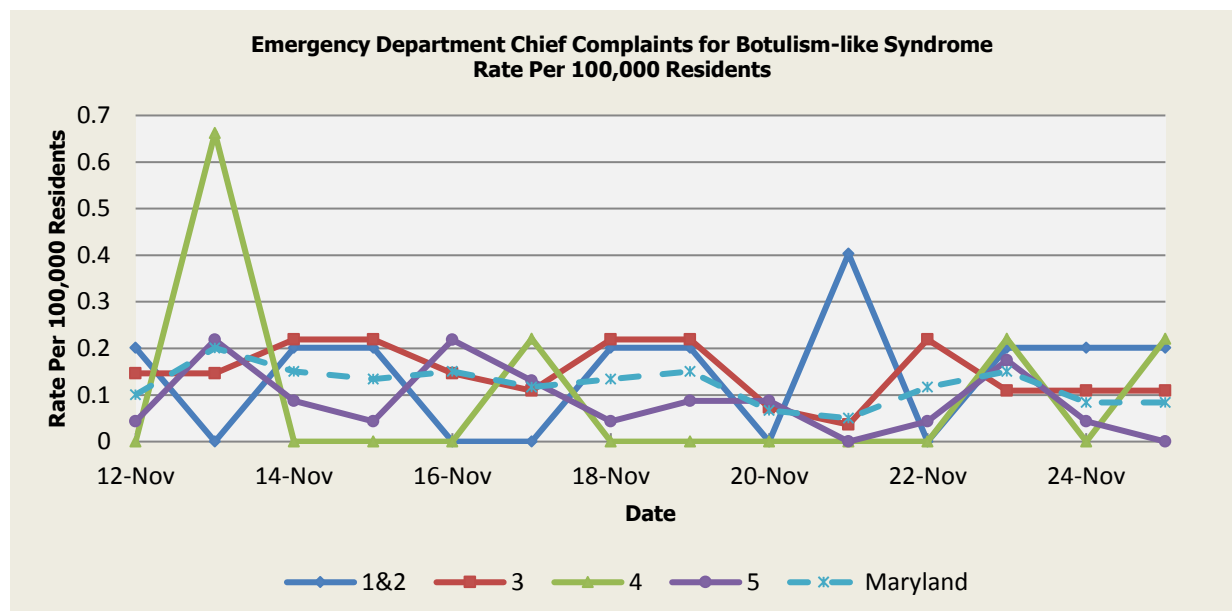


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.60	0.86	0.75	0.43	0.66
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

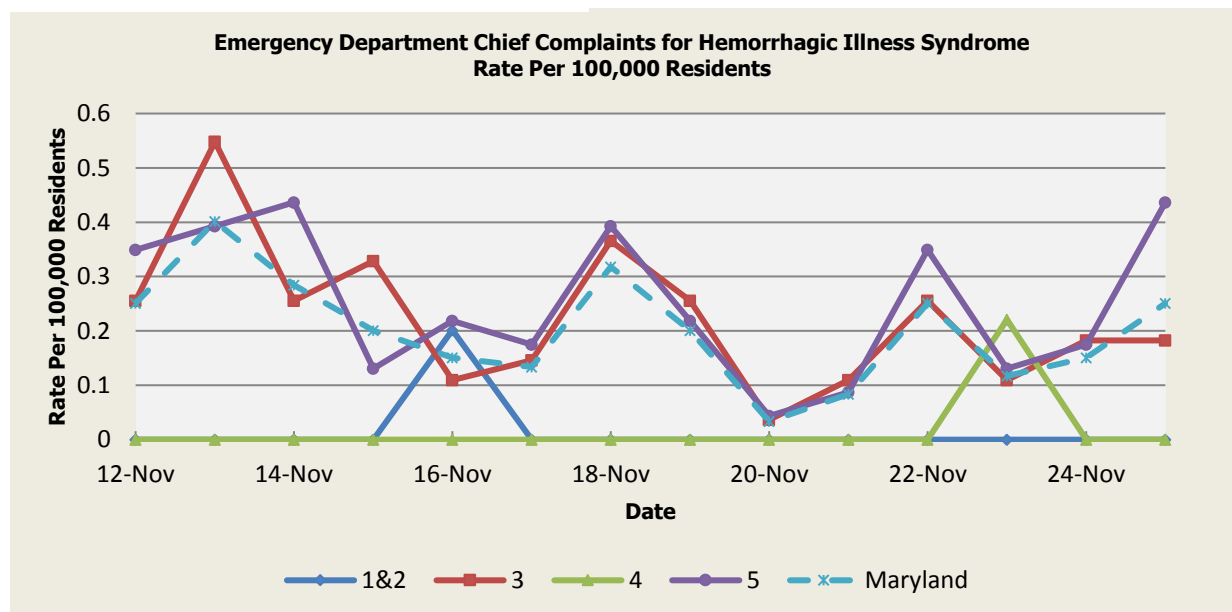
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 11/12 (Region 1&2), 11/13 (Regions 4,5), 11/14 (Regions 1&2,3), 11/15 (Regions 1&2,3), 11/16 (Regions 5), 11/17 (Region 4,5), 11/18 (Regions 1&2,3), 11/19 (Regions 1&2,3), 11/21 (Regions 1&2), 11/22 (Region 3), 11/23 (Regions 1&2,4,5), 11/24 (Region 1&2), 11/25 (Region 1&2,4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.05	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

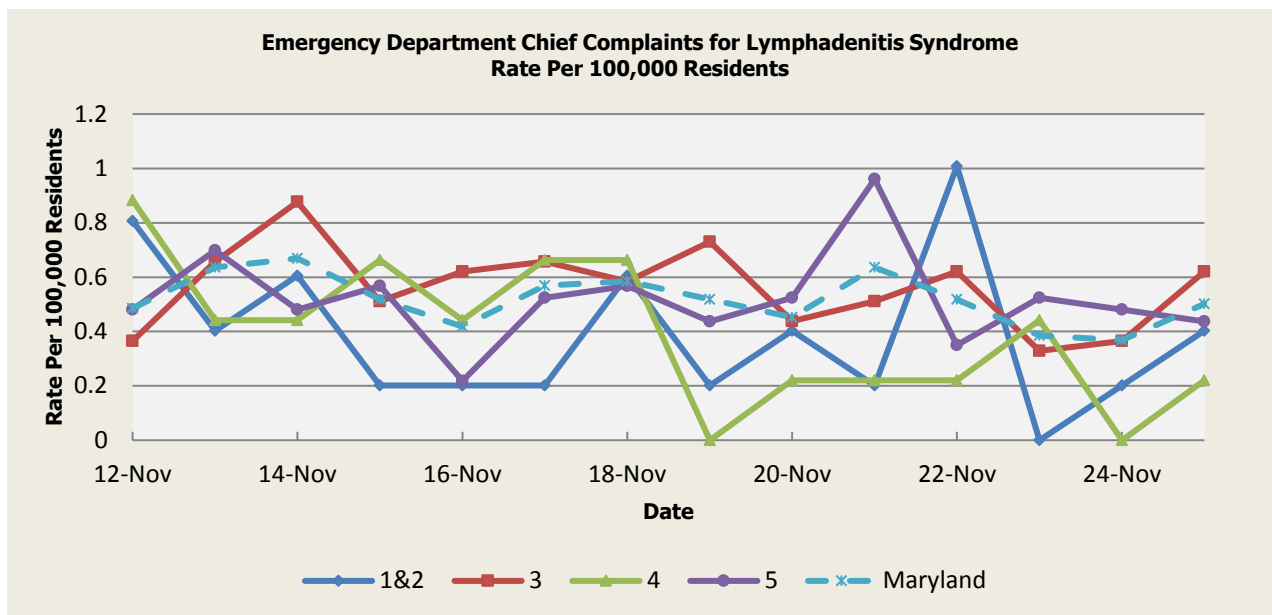
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 11/12 (Regions 3,5), 11/13 (Regions 3,5), 11/14 (Region 3,5), 11/15 (Region 3), 11/16 (Region 1&2,5), 11/18 (Region 3,5), 11/19 (Regions 3,5), 11/22 (Regions 3,5), 11/23 (Regions 4), 11/25 (Regions 5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.09
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 11/12 (Regions 1&2,4), 11/13 (Region 5), 11/21 (Region 4), and 11/22 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.29	0.49	0.32	0.30	0.39
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

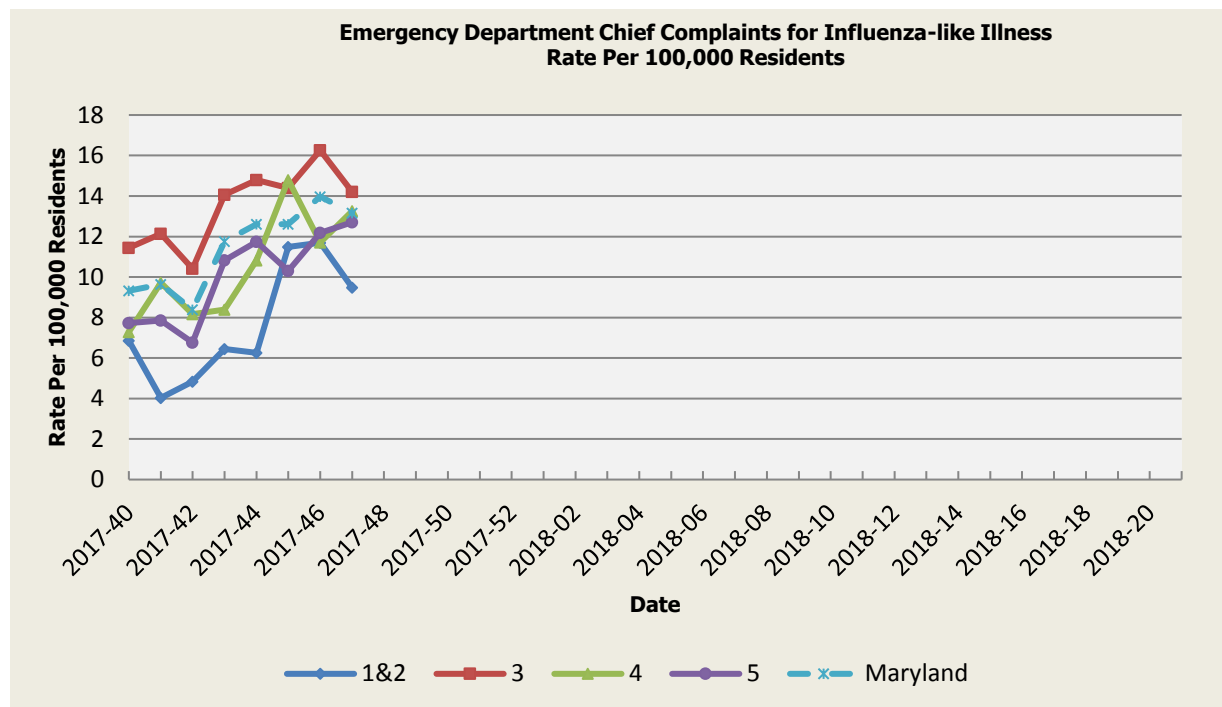
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	November			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Meningococcal disease	2	0	0	7	4.4	4
Measles	0	0.4	0	4	5.2	4
Mumps	1	0.6	0	24	43	21
Rubella	0	0.4	0	1	5.4	5
Pertussis	5	37.8	34	198	332.2	350
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	34	49.6	48	825	891	899
Shigellosis	9	14.2	11	229	196	217
Campylobacteriosis	39	45.6	48	782	719.8	724
Shiga toxin-producing Escherichia coli (STEC)	7	9.6	8	182	145.2	138
Listeriosis	2	1.2	1	27	16.6	16
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.2	0	4	14.4	13
Lyme Disease	109	159.4	166	3193	2930.6	2725
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	2	0	0	10.4	0
Dengue Fever	1	2.6	2	22	29	21
Zika Virus***	0	1	0	4	18.2	7
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	11	8.8	8	223	170	177
Aseptic meningitis	31	32.8	35	401	435	446

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of November 31, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 65.

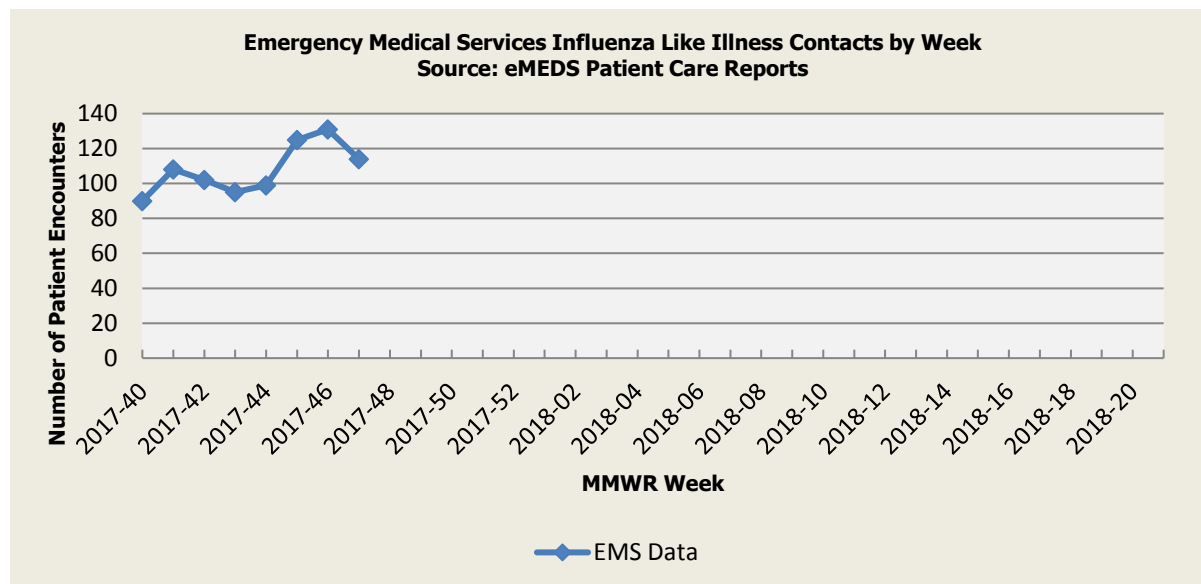
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 45 was: Local Geographic Spread with Minimal Intensity.



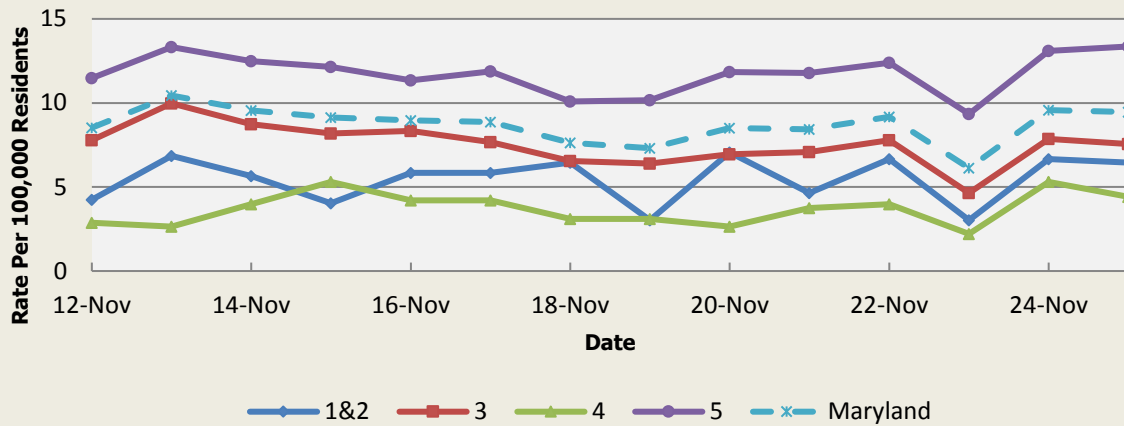
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.65	12.89	11.82	11.17	11.88
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

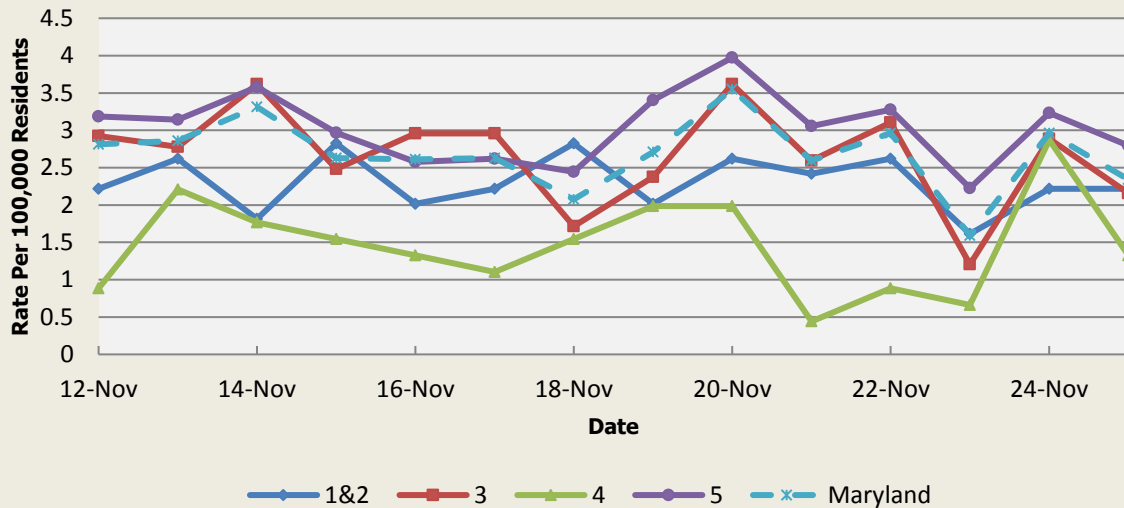


There was an appreciable increase above baseline in the rate of OTC medication sales on 11/13 (Region 3) during this reporting period. This increase is not known to be associated with any outbreaks.

OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.51	4.57	2.54	7.87	5.60
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



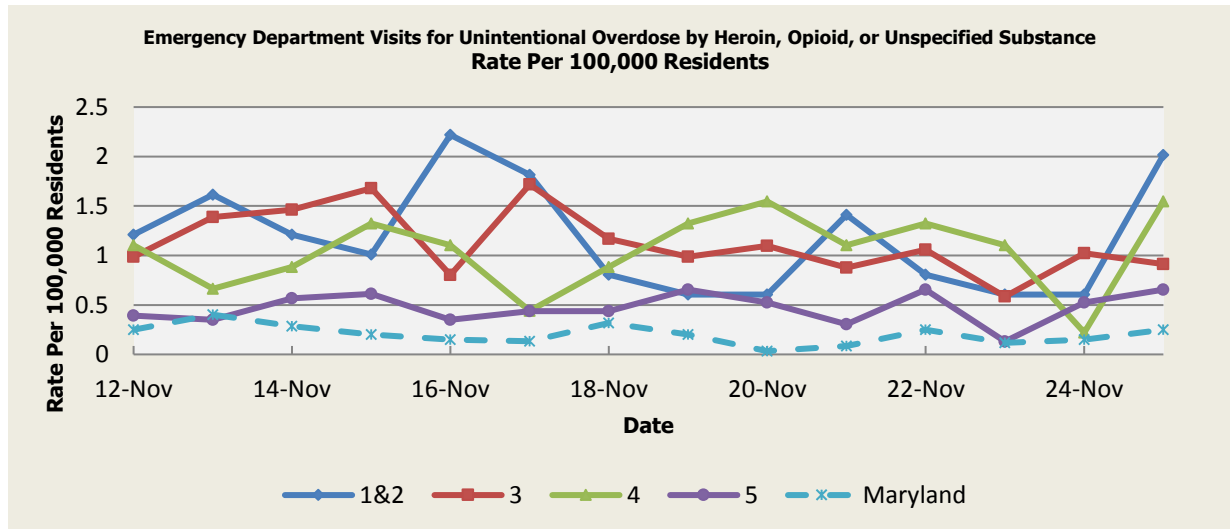
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.14	3.01	2.33	4.03	3.36
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

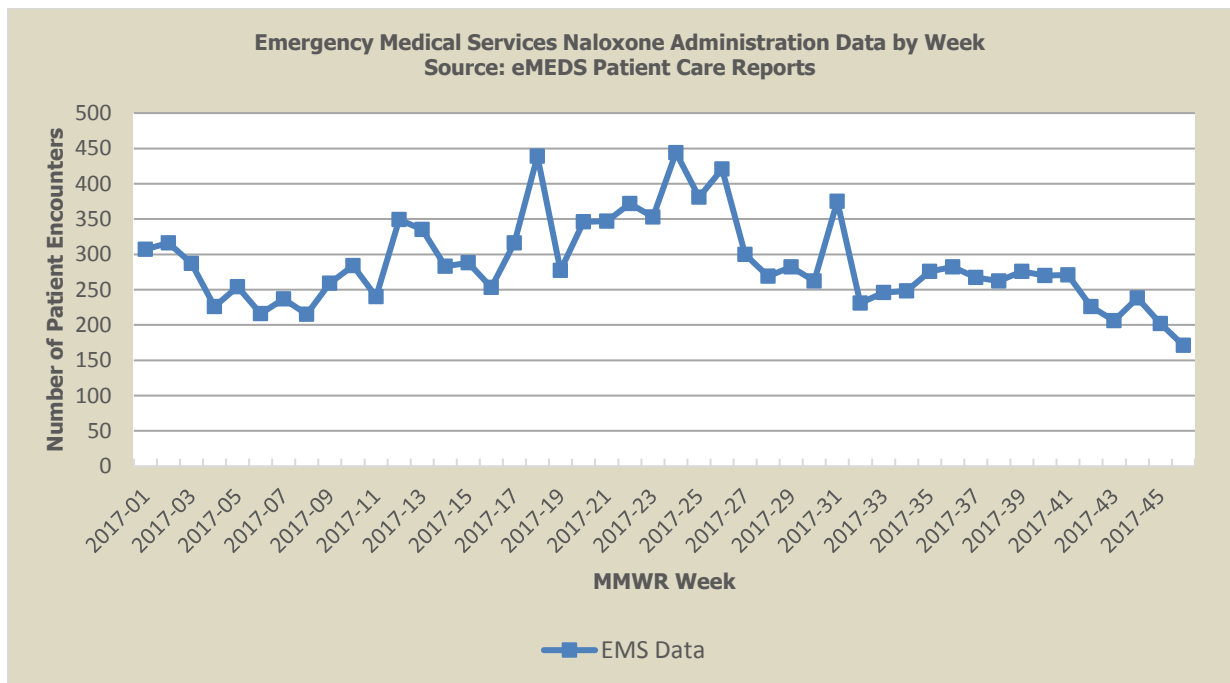
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that most fatal overdoses are Opioid-related.



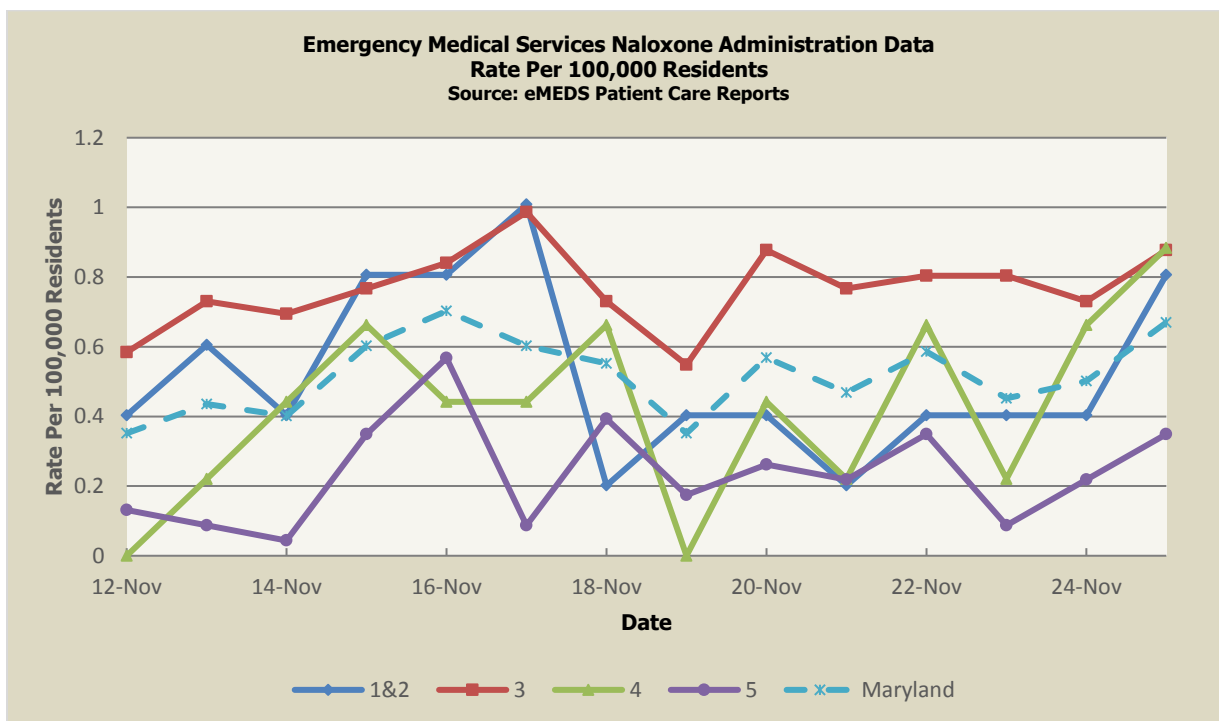
Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.39	0.35	0.14	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.39	0.35	0.14	0.28
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 30, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 860, of which 454 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

HPAI H5N6 (SOUTH KOREA) 28 Nov 2017, A highly pathogenic strain of avian influenza - H5N6 - has been confirmed in Korea's southern Jeju island. It's the 3rd such confirmation since the turn of winter. The environment ministry says the virus, discovered in wild bird droppings last week, is highly-contagious. Read More: <https://www.promedmail.org/post/5470698>

HUMAN AVIAN INFLUENZA

There were no cases of human avian influenza reported this week.

NATIONAL DISEASE REPORTS

SALMONELLA (GEORGIA) 26 Nov 2017, The Georgia Department of Public Health Northwest Health District has concluded that the cause of the foodborne illness outbreak related to a catered Thanksgiving meal employee event at Toyo Tire in White, GA on 14 and 15 Nov 2017 was salmonellosis. The determination is based on multiple positive lab-test results for salmonella from employees who attended the event. There have been 5 hospitalizations due to the outbreak. The specific food source has not been identified by officials. Read More: <https://www.promedmail.org/post/5466579>

INTERNATIONAL DISEASE REPORTS

YELLOW FEVER (BRAZIL), 20 Nov 2017, Between July and mid-October 2017, a total of 71 suspected yellow fever cases were reported in Sao Paulo State, Brazil. Of these, 2 were confirmed, 6 are under investigation, and 63 were ruled out. The 2 confirmed cases (one of which was fatal) were reported. Read More: <https://www.promedmail.org/post/5464211>

E. COLI EHEC (PORTUGAL) 25 Nov 2017, A 7 year old girl from Maia, northern Portugal, has died days after falling ill due to a food-related Escherichia coli infection. Her death was initially linked to her pet hamster [but] authorities have since confirmed the illness is infectious. The young schoolgirl is believed to have caught the dangerous bacterium from something she ate, which caused vomiting and diarrhea and subsequent kidney failure. Read More: <https://www.promedmail.org/post/5463997>

HEPATITIS A (BULGARIA) 26 Nov 2017, There is a boom of infected patients with hepatitis A in Rakovski. There are sick children in several schools and kindergartens. The 1st diseases have been since the beginning of September 2017. Everyone has gone through the infectious clinic in Plovdiv, say

the city's health inspection. Read More: <https://www.promedmail.org/post/5464021>

RIFT VALLEY FEVER (UGANDA) 26 Nov 2017, An outbreak of Rift Valley fever (RVF) in the central districts of Mityana and Kiboga has killed 2 people. Charles Olaro, acting director general of health services at the ministry of health, said in a statement that blood samples taken from 2 dead patients in Mityana and Kiboga tested positive for RVF. Read More: <https://www.promedmail.org/post/5465725>

DIPHTHERIA (YEMEN) 26 Nov 2017, Diphtheria has infected at least 120 people since early November 2017, and this will only worsen if health facilities don't get the fuel they need. At least one million children are at risk of contracting the disease if vaccines and medicine continue to be denied entry, according to the World Health Organization. Read More: <https://www.promedmail.org/post/5466156>

JAPANESE ENCEPHALITIS (INDIA) 27 Nov 2017, Having already infected 26 people in the state [Maharashtra] this year [2017], Japanese encephalitis (JE), a mosquito-borne viral disease, has set a 5-year record. What is more worrying, the virus seems to have adapted and spread to areas outside its endemic zone. In fact, along with dengue and chikungunya, JE has emerged as a potential threat this year. Read More: <https://www.promedmail.org/post/5466854>

PLAGUE (MADAGASCAR) 27 Nov 2017, A total of 2348 confirmed, probable and suspected cases of plague, including 202 deaths (case fatality rate 8.6 percent), were reported by the Ministry of Health of Madagascar to WHO. There were 1791 cases of pneumonic plague, of which 22 percent were confirmed, 34 percent were probable, and 44 percent were suspected. Read More: <https://www.promedmail.org/post/5467648>

ANTHRAX (THAILAND) 27 Nov 2017, A team has been dispatched from Mae Sot Hospital in Tak to investigate a suspected anthrax infection after 3 villagers in Tambon Mahawan developed suspicious symptoms after eating goat meat reportedly brought in from a neighbouring country. Read More: <https://www.promedmail.org/post/5468023>

MERS-COV (SAUDI ARABIA) 29 Nov 2017, Since the last ProMED-mail update, through 29 Nov 2017, there have been a total of: 4 newly confirmed cases, 1 newly reported fatality, and 4 newly reported recoveries. Read More: <https://www.promedmail.org/post/5472838>

INFLUENZA (WHO UPDATE) 29 Nov 2017, Influenza activity increased slightly in the temperate zone of the northern hemisphere while in the temperate zone of the southern hemisphere activity appeared to have decreased at inter-seasonal levels. In Central America and the Caribbean, influenza activity remained low. Worldwide, influenza A(H3N2) and B viruses accounted for the majority of influenza detections. Read More: <https://www.promedmail.org/post/5472374>

CRIMEAN- CONGO HEM. FEVER (MAURITANIA) 29 Nov 2017, the Mauritania Ministry of Health has reported an addition CCHF case last week [week ending Sun 26 Nov 2017] in a 48-year-old male farmer from Haye Sakin community in Dar Nairn, at the outskirts of the capital city, Nouakchott. He fell sick on the [11 Nov 2017] and was later treated and discharged last week. Read More: <https://www.promedmail.org/post/5472475>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: <http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential B event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a

definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

